IMPLEMENTATION OF RME MODEL ASSISTANCE E-LEARNING TO IMPROVE SKILLS OF STUDENT PROCESS IN COURSE INTRODUCTION PROBABILITY

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Abstract

In the teaching and learning process the lecturer occupies a very central position, because its role is very decisive. Lecturers must be able to translate and describe the content contained in the curriculum, then transform the contents to the students through the process of teaching and learning. Apart from that, improving and developing the quality of education is always expected. Therefore, the way of improvement and development is also a problem for us all. Neither government, society, nor individual should feel obliged to endure it. In learning, science and technology great role to promote a country. To be an advanced country, the nation must be ingenious, clever and a lot of knowledge, both social science, natural science, introduction of probability and other sciences that are skilled. Without prejudice to any other knowledge, the role of introductory probability is likely to be very important and needs serious handling. Introduction probability is a discipline that has a characteristic compared with the discipline of science. Therefore, learning and teaching activities required a method, given the different students of different levels of ability. Introduction probability arises because of human thoughts associated with ideas, processes and reasoning. Learning on the material still uses expository methods. In this research, Realistic Matematics Education (RME) model with E-learning will be used.

1.1 BackGround

The process of teaching and learning in the world of education is a system that fosters a teacher's will to manage the teaching as a whole. In the teaching and learning process the lecturer occupies a very central position, because its role is very decisive. Lecturers must be able to translate and describe the content contained in the curriculum, then transform the contents to the students through the process of teaching and learning. Apart from that, improving and developing the quality of education is always expected. Therefore, the way of improvement and development is also a problem for us all. Neither government, society, nor individual should feel obliged to endure it.

In learning, science and technology great role to advance a country. To be an advanced country, the nation must be ingenious, clever and a lot of knowledge, both social science, natural science, introduction of probability and other sciences that are skilled. Without prejudice to any other knowledge, the role of introductory probability is likely to be very important and needs serious handling. Introduction probability is a discipline that has a characteristic compared with the

discipline of science. Therefore, learning and teaching activities required a method, given the different students of different levels of ability.

Introduction probability arises because of human thoughts associated with ideas, processes and reasoning. Learning on the material still uses expository methods. In this research, Realistic Matematics Education (RME) model with E-learning will be used.

1.2 RME and the Formation of Student Thinking Skills

The classic problem that always arises is a public complaint that the introductory process of introduction in college still uses a traditional or mechanistic approach, ie a lecturer actively teaches introductory probabilities, then gives examples and exercises, on the other hand the students function like machines, they hear, , and doing the training given by the lecturer.

According to Soedjadi (2000), in an effort to revitalize it is necessary courage, honesty to see the reality that is happening in the field without having to find who is wrong and sincerely acknowledge the weaknesses that exist, as well as carefully directing the improvement of the interest of the quality of the students as our young generation. Improving the quality of learners can not be done by turning a blind eye to the reality of Indonesian environmental diversity. We should be able to gaze out, but also have to respond inside. Staring out means we must be able to keep up with developments and changes in various countries whose intentions can be picked and beneficial to the Indonesian nation.

In general, the lecturer controls the introduction of probability only at the level of application, so that the lecturer is only able to the degree of user introduction of probability. As a result, he will not be able to participate in developing the science of probability to penetrate the area of ignorance.

Opportunities in class discussions are rarely done and interaction and communication are poorly encouraged. Along with such learning process, according to de Lange (2001), that the purpose of giving probability introduction material should be focused and its application must be adjusted to what ever experienced by the student everyday.

1.3 2.1 Education Strategy RME in Indonesia

Selter in Zulkardi (2001) stresses that all RME activities are mediated through lecturers, particularly through teacher's beliefs on how to organize and facilitate students learning introductory probabilities. In this context, LPTKs (pre-service or in-service) play an important role. One of the key strategies in this situation is to involve them, lecturers or prospective lecturers, in their professional development using the following strategies: (1) lecture or brief training (to improve the knowledge and skills of lecturers or prospective lecturers), (2) curriculum development (by adapting innovative learning materials directly to class or college); and (3) technology (to provide rich media information and the new approach).

2.2 E Learning

E-learning which is a continuation of elektoric learning has various kinds of understanding, depending on the point of view of his judgment. E-learning as any teaching and learning that uses electronic circuits, such as: LAN, WAN, or the Internet (Newspaper, 2002) defines e-learning as an asynchoronous learning activity through a computer-generated electronic device that obtains learning materials to suit the needs. The basic criteria that exist in e-learning, namely: (a) e-learning is a network, which makes it able to quickly repair, store or retrieve, distribute, and sharing learning and information. This requirement is very important in e-learning, so Rosenberg calls it an absolute requirement; (b) e-learning is sent to the user through a computer using an internet technology standard. CD ROMs, Web TV, Web Cell Phones, pagers, and other personal digital aids even though they can prepare learning messages but can not be classified as e-learning; (c) e-learning is focused on the broadest view of learning, learning solutions that outweigh traditional paradigms in training. The above description shows that as the basis of e-learning is the utilization of internet technology. So e-learning is a form of conventional learning that is poured in digital format through internet technology.

Based on the above theoretical study, e-learning in this study is a learning process that utilizes e-learning from UNIMUS with the address elearning.unimus.ac.id as an intermediary in meyampiakan course material, the tasks assigned to the students and the results of the assignment of students uploaded in the e-learning page. At the time of entry to the web will be tracked about the delivery time of each student's assignment, so that students who are late to collect tasks atupun not collect will be easily detected.

3.1 Method and Discussion

This research is designed in 3 cycles, each cycle consist of 4 stages, namely: (1) planning (planning); (2) implementation (action); (3) observation (observation); (5) reflection (reflection). Each cycle consists of 3 face-to-face meetings. Each cycle is implemented in accordance with the changes to be achieved, such as what has been designed. Factors investigated were process skills in the use of the RME model. Preliminary observations are made to be able to know the exact action given in order to improve the process skills in the use of the RME model.

The following steps are performed on each cycle in this studyCycle I

1. Planning:

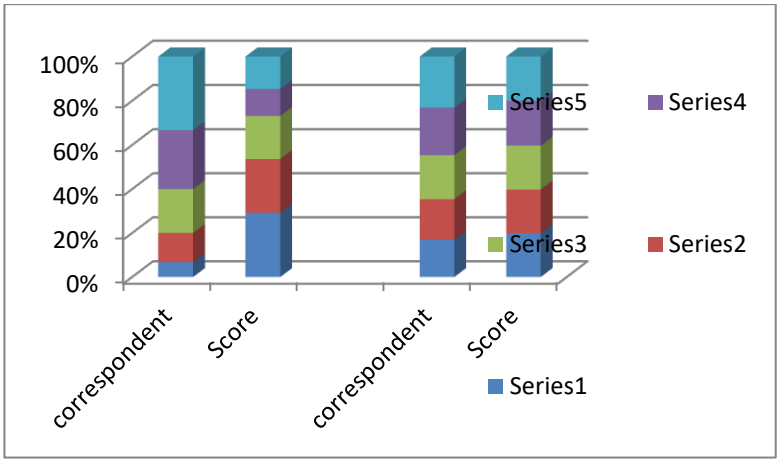
a. Researchers prepare SAP, GBPP and materials using conventional methods as well as direct practice.

b. The researcher prepared the learning media including the RME model.

c. Prepare the observation sheet to observe the situation and condition of teaching and learning activities.

d. Prepare evaluation tools to find out student learning outcomes.

2. Action



Picture 2. Learning Without RME and With RME

Based on the comparison above diagram shows that learning by using RME more effectively improve student learning achievement than those who have not used RME. It can be known from the color difference between diagram 1 with other diagrams. Diagrams that have evenly color tend to exhibit good learner skills rather than uneven patterns.

4. Conclusion

Implementation of the learning process in accordance with the SAP that has been made at the planning stage and using the e-learning assisted RME model. In the process of learning implementation consists of 3 activities, namely: opening, core and cover.

3. Observation

This class action research, observations carried out with several aspects observed .

3.2 Discussion

Learning by using RME has more influence on students' learning achievement than those who use RME. This can happen because learning RME can stimulate learners to be more active and innovative in following learning activities let alone assisted by E – Learning

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